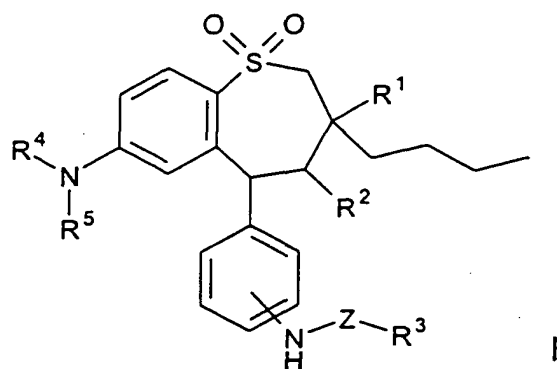


We claim:

1. A compound of formula I



in which

$R^1$  is methyl, ethyl, propyl, or butyl;

$R^2$  is H, OH,  $NH_2$ , or  $NH-(C_1-C_6)$ -alkyl;

$R^3$  is a sugar radical, a disugar radical, a trisugar radical, a tetrasugar radical, wherein said radicals are optionally mono- or polysubstituted by a sugar protective group;

$R^4$  is methyl, ethyl, propyl, or butyl;

$R^5$  is methyl, ethyl, propyl, or butyl;

Z is  $-(C=O)_n-(C_0-C_{16})$ -alkyl,  $-(C=O)_n-(C_0-C_{16})$ -alkyl-NH-,  $-(C=O)_n-(C_0-C_{16})$ -alkyl-O-,  $-(C=O)_n-(C_1-C_{16})$ -alkyl- $(C=O)_m$ , or a covalent bond;

n is 0 or 1;

m is 0 or 1;

5 or a pharmaceutically tolerable salt thereof, or a physiologically functional derivative thereof.

2. The compound of formula I as claimed in claim 1, wherein:

10  $R^1$  is ethyl, propyl, or butyl;

$R^2$  is H, OH,  $NH_2$ , or  $NH-(C_1-C_6)$ -alkyl;

$R^3$  is a sugar radical or disugar radical, wherein said radicals are optionally mono- or polysubstituted by a sugar protective group;

15  $R^4$  is methyl, ethyl, propyl, or butyl;

$R^5$  is methyl, ethyl, propyl, or butyl;

20 Z is  $-(C=O)_n-(C_0-C_{16})$ -alkyl-,  $-(C=O)_n-(C_0-C_{16})$ -alkyl-NH-,  
 $-(C=O)_n-(C_0-C_{16})$ -alkyl-O-,  $-(C=O)_n-(C_1-C_{16})$ -alkyl- $(C=O)_m$ , or a covalent bond;

n is 0 or 1;

25 m is 0 or 1;

or a pharmaceutically tolerable salt thereof.

3. The compound of formula I as claimed in claim 1, wherein:

30  $R^1$  is ethyl or butyl;

R<sup>2</sup> is OH;

R<sup>3</sup> is a sugar radical, wherein the sugar radical is optionally mono- or polysubstituted by a sugar protective group;

5

R<sup>4</sup> is methyl;

R<sup>5</sup> is methyl;

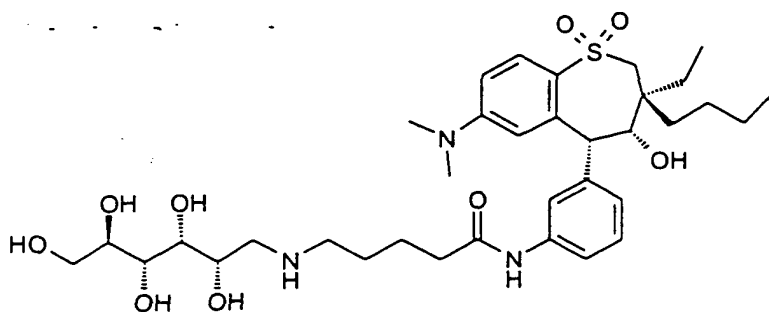
10

Z is -(C=O)-(C<sub>0</sub>-C<sub>4</sub>)-alkyl or a covalent bond;

or a pharmaceutically tolerable salt thereof.

4. A compound of the following structure:

15



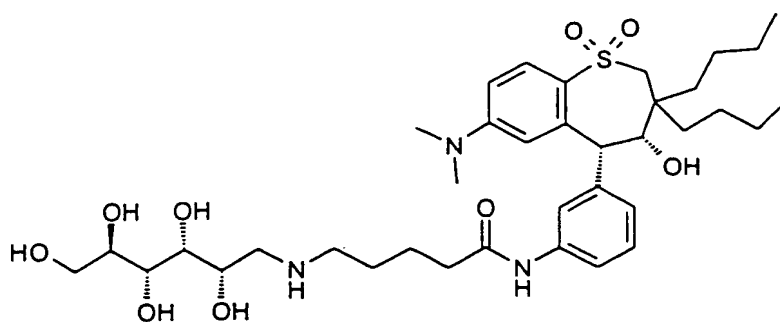
or a pharmaceutically tolerable salt thereof.

20 5. A pharmaceutical composition, comprising the compound as claimed in claim 4, and at least one pharmacologically tolerable excipient.

6. A method for the prophylaxis or treatment of a lipid metabolism disorder in a human or animal patient, comprising:

25 administering to the patient in need of said prophylaxis or treatment an effective amount of the compound as claimed in claim 4.

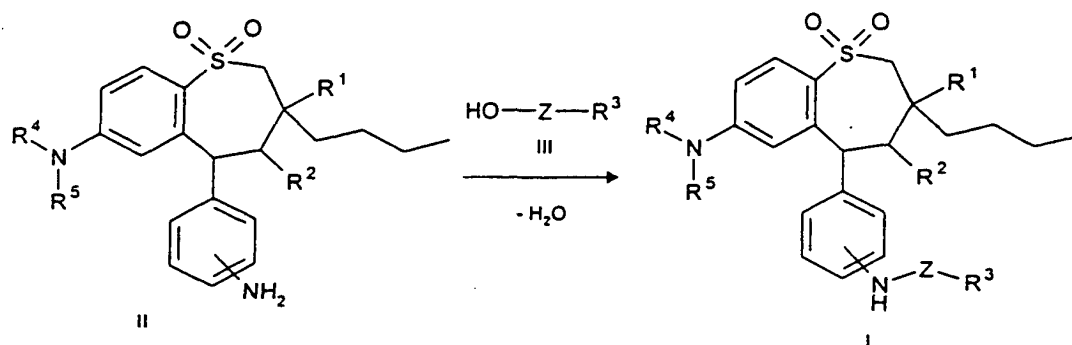
7. A method for the prophylaxis or treatment of gallstones in a human or animal patient, comprising:  
administering to the patient in need of such prophylaxis or treatment an effective amount of the compound as claimed in claim 4.
8. A method for the prophylaxis or treatment of hyperlipidemia in a human or animal patient, comprising:  
administering to the patient in need of such prophylaxis or treatment an effective amount of the compound as claimed in claim 4.
9. A method for lowering the serum cholesterol level in a human or animal patient, comprising:  
administering to the patient in need of said lowering an effective amount of the compound as claimed in claim 4.
10. A method for the prophylaxis or treatment of one or more arteriosclerotic symptoms in a human or animal patient, comprising:  
administering to the patient in need of said prophylaxis or treatment an effective amount of the compound as claimed in claim 4.
11. A compound of the following structure:



or a pharmaceutically tolerable salt thereof.

12. A pharmaceutical composition, comprising the compound as claimed in claim 11, and at least one pharmacologically tolerable excipient.
- 5 13. A method for the prophylaxis or treatment of a lipid metabolism disorder in a human or animal patient, comprising:  
administering to the patient in need of said prophylaxis or treatment an effective amount of the compound as claimed in claim 11.
- 10 14. A method for the prophylaxis or treatment of gallstones in a human or animal patient, comprising:  
administering to the patient in need of such prophylaxis or treatment an effective amount of the compound as claimed in claim 11.
- 15 15. A method for the prophylaxis or treatment of hyperlipidemia in a human or animal patient, comprising:  
administering to the patient in need of such prophylaxis or treatment an effective amount of the compound as claimed in claim 11.
- 20 16. A method for lowering the serum cholesterol level in a human or animal patient, comprising:  
administering to the patient in need of said lowering an effective amount of the compound as claimed in claim 11.
- 25 17. A method for the prophylaxis or treatment of one or more arteriosclerotic symptoms in a human or animal patient, comprising:  
administering to the patient in need of said prophylaxis or treatment an effective amount of the compound as claimed in claim 11.

18. A process for the preparation of a compound of formula I, as claimed in claim 1, wherein said process comprises reacting, according to the following equation,



an amine of formula II or a salt thereof, in which  $R^1$ ,  $R^2$ ,  $R^4$  and  $R^5$  have the meanings indicated for formula I, with a compound of formula III or a salt thereof, in which  $R^3$  and Z have the meanings indicated for formula I, with elimination of water to give a compound of formula I; and optionally converting the compound of formula I obtained into a physiologically tolerable salt thereof.

19. A pharmaceutical composition comprising one or more compounds of formula I as claimed in claim 1, and at least one pharmacologically tolerable excipient.

20. The pharmaceutical composition as claimed in claim 19, further comprising one or more statins.

21. A pharmaceutical composition for the prophylaxis or treatment of a lipid metabolism disorder, comprising an effective amount of one or more compounds of formula I as claimed in claim 1, and at least one pharmacologically tolerable excipient.

22. A method for the prophylaxis or treatment of a lipid metabolism disorder in a human or animal patient, comprising:  
administering to the patient in need of said prophylaxis or treatment an effective amount of the compound of formula I as claimed in claim 1.

23. A pharmaceutical composition for the prophylaxis or treatment of gallstones, comprising an effective amount of one or more compounds of formula I as claimed in claim 1, and at least one pharmacologically tolerable excipient.
- 5
24. A method for the prophylaxis or treatment of gallstones in a human or animal patient, comprising:  
administering to the patient in need of such prophylaxis or treatment an effective amount of the compound of formula I as claimed in claim 1.
- 10
25. A pharmaceutical composition for the prophylaxis or treatment of hyperlipidemia, comprising an effective amount of one or more compounds of formula I as claimed in claim 1, and at least one pharmacologically tolerable excipient.
- 15
26. A method for the prophylaxis or treatment of hyperlipidemia in a human or animal patient, comprising:  
administering to the patient in need of such prophylaxis or treatment an effective amount of the compound of formula I as claimed in claim 1.
- 20
27. A pharmaceutical composition for lowering the serum cholesterol level in a human or animal patient, comprising an effective amount of one or more compounds of formula I as claimed in claim 1, and at least one pharmacologically tolerable excipient.
- 25
28. A method for lowering the serum cholesterol level in a human or animal patient, comprising:  
administering to the patient in need of said lowering an effective amount of the compound of formula I as claimed in claim 1.
- 30
29. A pharmaceutical composition for the prophylaxis or treatment of one or more arteriosclerotic symptoms, comprising an effective amount of one or more

compounds of formula I as claimed in claim 1, and at least one pharmacologically tolerable excipient.

30. A method for the prophylaxis or treatment of one or more arteriosclerotic symptoms in a human or animal patient, comprising:  
administering to the patient in need of said prophylaxis or treatment an effective amount of the compound of formula I as claimed in claim 1.